Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application
Listing of Claims:

Claims 1-53 (canceled)

Claim 54 (previously presented): A modular prosthesis for repairing an aortic aneurysm in an aorta extending from a heart of a patient, comprising:

a prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and extending longitudinally between a proximal end and a distal end, said prosthesis portion having a single inlet at said proximal end;

a proximal prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and having a proximal end and a distal end, said proximal prosthesis portion having a single inlet at said proximal end and a single outlet at said distal end, said proximal prosthesis portion being formed separately from said prosthesis portion and being adapted to lie in the aorta with said proximal end pointing toward the heart and sized to fit a diameter of the aorta;

each of said prosthesis portion and said proximal prosthesis portion including a flexible layer and an expandable stent radially supporting said flexible layer along substantially the entire length thereof; and

joining means for intraluminally joining said distal end of said proximal prosthesis portion to said proximal end of said prosthesis portion.

Claim 55 (currently amended): The modular prosthesis as claimed in claim 54, wherein said joining means includes a friction fit engagement between said distal end of said proximal prosthesis portion in said expanded configuration and said proximal end of said ~~base member~~ prosthesis portion in said expanded configuration.

Claim 56 (previously presented): The modular prosthesis as claimed in claim 54, wherein said proximal prosthesis portion has a first diameter at said proximal end and a second diameter less than said first diameter at said distal end.

Claim 57 (Currently Amended): The modular prosthesis as claimed in claim 54, further comprising securing means projecting from said proximal end of said proximal prosthesis portion for securing said ~~primary limb~~proximal prosthesis portion to the aorta.

Claim 58 (previously presented): A modular prosthesis for repairing an aortic aneurysm in an aorta extending from a heart of a patient, comprising:

a prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and having a proximal end and a distal end;

a proximal prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and having a proximal end and a distal end, said proximal prosthesis portion being formed separately from said prosthesis portion and being adapted to lie in the aorta with said proximal end pointing toward the heart and sized to fit a diameter of the aorta;

each of said prosthesis portion and said proximal prosthesis portion including a flexible layer and an expandable stent radially supporting said flexible layer along substantially the entire length thereof;

at least one distal prosthesis portion expandable radially between a collapsed configuration and an expanded configuration and having a proximal end and a distal end, said distal prosthesis portion including a flexible layer and an expandable stent radially supporting said flexible layer along substantially the entire length thereof; and

connecting means for connecting said proximal end of said distal prosthesis portion to said distal end of said prosthesis portion.

Claim 59 (previously presented): The modular prosthesis as claimed in claim 58, wherein said connecting means includes a friction fit engagement between said proximal end of said distal

prosthesis portion in said expanded configuration and said distal end of said prosthesis portion in said expanded configuration.

Claim 60 (previously presented): The modular prosthesis as claimed in claim 58, wherein said distal prosthesis portion has a length between said proximal end and said distal end of between about 4 cm and about 15 cm.

Claim 61 (previously presented): The modular prosthesis as claimed in claim 58, further comprising a segment having a different radiopacity on at least one of said prosthesis portion, said proximal prosthesis portion, and said distal prosthesis portion, said segment having a radiographic image that is detectable using a detector outside the body.

Claim 62 (previously presented): The modular prosthesis as claimed in claim 61, wherein said segment having said different radiopacity comprises at least one radiopaque marker.

Claim 63 (previously presented): The modular prosthesis as claimed in claim 61, wherein said radiographic image of said segment differs depending on the rotational orientation of said first prosthesis portion so that said rotational orientation can be determined.

Claim 64 (previously presented): The modular prosthesis as claimed in claim 63, wherein said segment having said different radiopacity is configured in a "V" shape.

Claim 65 (previously presented): The modular prosthesis as claimed in claim 61, wherein said segment having said different radiopacity is positioned toward an end of at least one of said prosthesis portion, said proximal prosthesis portion, and said distal prosthesis portion to facilitate alignment.

Claim 66 (previously presented): The modular prosthesis as claimed in claim 65, wherein each of said prosthesis portion, said proximal prosthesis portion, and said distal prosthesis portion has a segment having said different radiopacity.

Claim 67 (previously presented): The modular prosthesis as claimed in claim 58, said connecting means comprising:

a male engaging portion associated with said distal prosthesis portion which has an outer surface and can be compressed radially inwardly; and

a female portion associated with said prosthesis portion cooperating with said male engaging portion, said female portion having an inner surface;

wherein said prosthesis portion and said distal prosthesis portion each comprises a shape memory alloy and said male engaging portion can be entered into said female portion in a radially compressed state and thereafter expanded in said female portion and wherein a frictional inter-engagement between said outer surface of said male engaging portion and said inner surface of said female portion prevents longitudinal movement of said prosthesis portion relative to said distal prosthesis portion.

Claim 68 (previously presented): The modular prosthesis as claimed in claim 67, wherein said male engaging portion is flared radially outwardly towards a proximal end.

Claim 69 (previously presented): The modular prosthesis as claimed in claim 67, wherein said female portion is tapered radially inwardly towards a distal end.

Claim 70 (previously presented): The modular prosthesis as claimed in claim 67, wherein said male engaging portion comprises a frustoconical wall flaring outwardly towards a longitudinal extremity.

Claim 71 (previously presented): The modular prosthesis as claimed in claim 67, wherein said female portion comprises a frustoconical wall tapering radially inwardly towards a longitudinal extremity.

Claim 72 (previously presented): The modular prosthesis as claimed in claim 58, wherein said expandable stent comprises:

a plurality of hoops aligned along a common axis,

each of said hoops oriented in a plane substantially perpendicular to a longitudinal axis of the stent, and each of said hoops including a plurality of elongate elements joined to one another and forming apices that point in a direction along the axis of the stent; and

means for securing an apex of one hoop to a juxtaposed apex of a neighboring hoop.

Claim 73 (previously presented): The modular prosthesis as claimed in claim 58, wherein said expandable stent comprises a plurality of hoops which are axially displaced in a tubular configuration along a common axis, each of said hoops

(a) being formed by a substantially complete turn of a sinuous wire having apices, and

(b) having a circumference that lies in a plane substantially perpendicular to the longitudinal axis of said stent;

wherein apices of adjacent hoops are juxtaposed to one another, and at least two juxtaposed apices are connected by a securing means.